

Silabus Mata Kuliah Pilihan (Teknik Kontrol)

Mata Kuliah	:	Dasar Sistem Kendali Cerdas
Kode	:	E113921
Silabus	:	Intro to Inteligent Systems/Machines and Intelligent Control, Fuzzy Set Theory, Fuzzy rules, Fuzzy Reasoning, Fuzzy Inference Systems, Fuzzy Control, Biological Neural Networks, Neuron Model and Computation, Perceptron, Supervised Learning, Adaptive Linear Networks, Multilayer Feedforward Neural Networks, BackPropagation, Applications of Intelligent Systems and Intelligent Control, Matlab Implementation, Robotics
Luaran	:	After completing this course students should able to : Compare crisp set and fuzzy set, Formulate fuzzy membership function, Understand continuous and discrete fuzzy set, Perform various fuzzy set operations, Compute fuzzy relation composition, Compute membership function of fuzzy rules, Understand fuzzy reasoning, Compute Fuzzy Inference System, Design fuzzy logic control, Determize fuzzy rules in fuzzy control, Program fuzzy concepts in Matlab, Understand neuron model, Compute neuron output given an input signal, perform perceptron training, understand adaptive networks, understand supervised learning, comprehend MFNN, perform MFNN forward computation, perform Backpropagation to update MFNN weights, comprehend fuzzy embedded control, program fuzzy control on microprocessor/microcontroller, understand the use of ANN in pattern recognition and in control, compare model based design with intelligent systems methods, use Fuzzy Logic Toolbox in Matlab, use Neural Networks Toolbox in Matlab, implement fuzzy inference system in embedded microcontroller/microprocessor, Understand basic pinciples of mobile robots
Syarat/ PraSyarat MK Lain	:	Sistem Mikroprosesor, Sistem Kendali
Alokasi	:	16 kali pertemuan
Sumber Pustaka	:	